

EXHIBIT 1

**UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

Headwater Research LLC,

Plaintiff,

vs.

Verizon Communications Inc., Celco
Partnership, d/b/a Verizon Wireless, Verizon
Corporate Services Group Inc.,

Defendants.

CASE NO. 2:23-CV-00352-JRG-RSP

**PLAINTIFF HEADWATER
RESEARCH LLC'S DISCLOSURE
OF ASSERTED CLAIMS AND
INFRINGEMENT CONTENTIONS**

JURY DEMANDED

**PLAINTIFF HEADWATER RESEARCH LLC'S DISCLOSURE OF
ASSERTED CLAIMS AND INFRINGEMENT CONTENTIONS**

Pursuant to P.R. 3-1 and P.R. 3-2, patent owner Headwater Research LLC ("Headwater") hereby provides its disclosure of asserted claims and infringement contentions and its accompanying document production. This disclosure is based on the information available to Headwater as of the date of this disclosure, before Headwater has received any discovery on the design or operation of the defendants' products. Headwater reserves the right to amend this disclosure to the full extent permitted under the court's rules and orders.

**P.R. 3-1: DISCLOSURE OF ASSERTED CLAIMS AND INFRINGEMENT
CONTENTIONS**

P.R. 3-1(A): ASSERTED CLAIMS

Headwater asserts that defendants Verizon Communications Inc., Celco Partnership, d/b/a Verizon Wireless, Verizon Corporate Services Group Inc., (collectively "Verizon") infringe one or more of the following claims, directly, by inducement, by contributory infringement:

<i>U.S. Patent No.</i>	<i>Asserted Claims</i>
8,589,541	1-174
8,924,543	1-13, 15-16, 21-23, 28, 30-33, 35-47, 57-66, 68-72, 80, 85-93, 96, 98-99, 112-113, 120-121
9,198,042	1-9, 12-14, 16-18
9,215,613	1-24

Collectively, these four patents are referred to herein as the Asserted Patents, and these claims as the Asserted Claims.

P.R. 3-1(B): ACCUSED INSTRUMENTALITIES OF WHICH HEADWATER IS AWARE

In this section, Headwater provides lists of accused products that Headwater is aware of infringing based upon information presently available to it and its investigation to date. Headwater's infringement claims are not limited to these listed products and specifically extend to all products and apparatuses of Verizon similar to the listed products that include the claimed elements. Unless otherwise stated, Headwater's infringement assertions apply to all variations, versions, editions, and applications of each of the listed products.

U.S. PATENT NO. 8,589,541

Headwater accuses the following smartphones, basic phones, tablets, laptops, and hotspot devices sold (including those sold in bundles with data plans) or used by Verizon for use with Verizon's wireless network services of infringing each of the Asserted Claims of the '541 patent:

Servers, hardware, software, and services leased, owned, supported, and/or operated by Verizon comprising Verizon's wireless network services functionality.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Apple software (e.g., iOS, WatchOS, etc.) including but not limited to the following: iPad Air, iPad Mini 2, iPhone 5C, iPhone 5S, iPad Air

2, iPad mini 3, iPhone 6, iPhone 6 Plus, iPad mini 4, iPad Pro, 12.9 in., iPhone 6S, iPhone 6S Plus, iPad Pro, 9.7 in, iPhone 7, iPhone 7 Plus, iPhone SE (1st Gen), iPad (5th Gen), iPad Pro, 10.5 in., iPad Pro, 12.9 in. (2nd Gen), Watch Series 3, iPhone 8, iPhone 8 Plus, iPhone X, iPad (6th Gen), Watch Series 4, iPad Pro, 11 in. (1st Gen), iPad Pro, 12.9 in. (3rd Gen), iPhone XR, iPhone XS, iPhone XS Max, iPad (7th Gen), iPad Air (3rd Gen), iPad Mini (5th Gen), iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, Watch Series 5, iPad (8th Gen), iPad Air (4th Gen), iPad Pro, 11 in. (2nd Gen), Watch Series 6, Watch Nike Series 6, Watch SE, iPad Pro, 12.9 in. (4th Gen), iPhone 12, iPhone 12 Mini, iPhone 12 Pro, iPhone 12 Pro Max, iPhone SE (2nd Gen), iPad (9th Gen), iPad Mini (6th Gen), iPad Pro, 11 in. (3rd Gen), iPad Pro, 12.9 in. (5th Gen), iPhone 13, iPhone 13 Mini, iPhone 13 Pro, iPhone 13 Pro Max, Watch Series 7, iPad (10th Gen), iPad Air (5th Gen), Watch Series 8, Watch SE (2nd Gen), iPad Pro (6th Gen), iPhone 14, iPhone 14 Plus, Watch Ultra, iPhone 14 Pro, iPhone 14 Pro Max, iPhone SE (3rd Gen), iPhone 15, iPhone 15 Pro, and iPhone 15 Pro Max.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Android software (e.g., Android Operating System Platform) including but not limited to the following: Galaxy A03s, Galaxy A10e, Galaxy A13, Galaxy A14 5G, Galaxy A20, Galaxy A42 5G, Galaxy A50, Galaxy A53 5G UW, Galaxy Core Prime, Galaxy J3 Eclipse, Galaxy J7 V, Galaxy Note 10+, Galaxy Note 10+ 5G, Galaxy Note 20 5G, Galaxy Note 4, Galaxy Note 5, Galaxy Note 8, Galaxy Note 9, Galaxy S10, Galaxy S10 5G, Galaxy S10+, Galaxy S10e, Galaxy S20 FE 5G, Galaxy S20 Ultra 5G, Galaxy S20+ 5G, Galaxy S21 5G, Galaxy S21 FE 5G, Galaxy S21 Ultra 5G, Galaxy S21+ 5G, Galaxy S22, Galaxy S22 Ultra, Galaxy S22+, Galaxy S22+, Galaxy S23, Galaxy S5, Galaxy S6, Galaxy S6, Galaxy S6 edge, Galaxy S6 edge +, Galaxy S7, Galaxy S8, Galaxy S8+, Galaxy S9, Galaxy S9+, Galaxy XCover Pro, Galaxy XCover6 Pr, Galaxy Z Flip 3 5G, Galaxy Z Fold 3 5G, Galaxy Z Fold 4, Galaxy Z Flip 4, Note 10+ 5G, Galaxy J3 V 3rd Gen, Galaxy Note Pro, Galaxy Tab 4 (8.0, Galaxy Tab E, Galaxy Tab S, Galaxy Tab S2, Galaxy J7 V 2nd Gen, Tab S5e, Galaxy Tab A, Galaxy Note 20 Ultra 5G, Galaxy A02s, Galaxy A12, Galaxy A01, Galaxy A21, Galaxy A51, Galaxy S7 edge, Galaxy J, Galaxy Note 10, Galaxy S20 5G, Gear S, Avalon V, ZenFone V, ZenFone V Live, Nexus 6, Pixel, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, pixel 4, Pixel 4 XL, Pixel 5, Pixel 6, Pixel 6 Pro, Pixel 6a, Pixel 7 Pro, Pixel 7, Pixel XL, Desire 526, Desire 612, Desire 626, , One remix, 10, One M9, Brigadier, DuraForce Pro, DuraForce Pro 2, DuraForce Ultra 5G, DuraForce Ultra 5G UW, DuraSport 5G UW, Tab 4 8 Plus, Exalt LTE, Extravert 2, G Pad 10.1 LTE, G Pad x8.3, G Vista, G3, G4, G6, G7 ThinQ, G8 ThinQ, K20 V, K20 V, Lancet, Stylo 2 V, Stylo 5, V20, V30, V40 ThinQ, V50 ThinQ 5G, Velvet 5G UW, Lumina 735, Droid Maxx, Droid Maxx 2, Droid Mini, Droid Turbo, Droid Turbo 2, Droid X (2nd Gen), Edge 2022, edge 5G UW, Edge+, Edge+ 5G UW, moto e5 play, moto e6, moto force z droid, moto g play (2021), Moto g power (2021), moto g power (2022), moto g pure, Moto g stylus 5G, Moto g stylus 5G, moto g6, moto g7 play, moto g7 power, Moto X (2nd Gen), Moto Z Force Droid, Moto Z Play Droid, moto z2 force edition, Moto Z2 Play, moto z3, moto z4, one 5G UW, one 5G UW ace, Razr (2020), 8 V 5G UW, 2 V Tella, 3 V, 8 5G UW, Compact Phone, Phone, Hydrogen One, XP8, Xperia Z2 Tablet, 10 5G UW, 30 V 5G, and Ellipsis 8.

The products in the preceding list, including all variations, editions, and applications of the foregoing, and all products and apparatuses of Verizon similar to the foregoing that include the claimed elements are the '541 Accused Instrumentalities.

U.S. PATENT NO. 8,924,543

Headwater accuses the following smartphones, basic phones, tablets, laptops, and hotspot devices sold (including those sold in bundles with data plans) or used by Verizon for use with Verizon's wireless network services of infringing each of the Asserted Claims of the '543 patent:

Servers, hardware, software, and services leased, owned, supported, and/or operated by Verizon comprising Verizon's wireless network services functionality.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Apple software (e.g., iOS, WatchOS, etc.) including but not limited to the following: iPad Air, iPad Mini 2, iPhone 5C, iPhone 5S, iPad Air 2, iPad mini 3, iPhone 6, iPhone 6 Plus, iPad mini 4, iPad Pro, 12.9 in., iPhone 6S, iPhone 6S Plus, iPad Pro, 9.7 in, iPhone 7, iPhone 7 Plus, iPhone SE (1st Gen), iPad (5th Gen), iPad Pro, 10.5 in., iPad Pro, 12.9 in. (2nd Gen), Watch Series 3, iPhone 8, iPhone 8 Plus, iPhone X, iPad (6th Gen), Watch Series 4, iPad Pro, 11 in. (1st Gen), iPad Pro, 12.9 in. (3rd Gen), iPhone XR, iPhone XS, iPhone XS Max, iPad (7th Gen), iPad Air (3rd Gen), iPad Mini (5th Gen), iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, Watch Series 5, iPad (8th Gen), iPad Air (4th Gen), iPad Pro, 11 in. (2nd Gen), Watch Series 6, Watch Nike Series 6, Watch SE, iPad Pro, 12.9 in. (4th Gen), iPhone 12, iPhone 12 Mini, iPhone 12 Pro, iPhone 12 Pro Max, iPhone SE (2nd Gen), iPad (9th Gen), iPad Mini (6th Gen), iPad Pro, 11 in. (3rd Gen), iPad Pro, 12.9 in. (5th Gen), iPhone 13, iPhone 13 Mini, iPhone 13 Pro, iPhone 13 Pro Max, Watch Series 7, iPad (10th Gen), iPad Air (5th Gen), Watch Series 8, Watch SE (2nd Gen), iPad Pro (6th Gen), iPhone 14, iPhone 14 Plus, Watch Ultra, iPhone 14 Pro, iPhone 14 Pro Max, iPhone SE (3rd Gen), iPhone 15, iPhone 15 Pro, and iPhone 15 Pro Max.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Android software (e.g., Android Operating System Platform) including but not limited to the following: Galaxy A03s, Galaxy A10e, Galaxy A13, Galaxy A14 5G, Galaxy A20, Galaxy A42 5G, Galaxy A50, Galaxy A53 5G UW, Galaxy Core Prime, Galaxy J3 Eclipse, Galaxy J7 V, Galaxy Note 10+, Galaxy Note 10+ 5G, Galaxy Note 20 5G, Galaxy Note 4, Galaxy Note 5, Galaxy Note 8, Galaxy Note 9, Galaxy S10, Galaxy S10 5G, Galaxy S10+, Galaxy S10e, Galaxy S20 FE 5G, Galaxy S20 Ultra 5G, Galaxy S20+ 5G, Galaxy S21 5G, Galaxy S21 FE 5G, Galaxy S21 Ultra 5G, Galaxy S21+ 5G, Galaxy S22, Galaxy S22 Ultra, Galaxy S22+, Galaxy S22+, Galaxy S23, Galaxy S5, Galaxy S6, Galaxy S6, Galaxy S6 edge, Galaxy S6 edge +, Galaxy S7, Galaxy S8, Galaxy S8+, Galaxy S9, Galaxy S9+, Galaxy XCover Pro, Galaxy XCover6 Pr, Galaxy Z Flip 3 5G, Galaxy Z Fold 3 5G, Galaxy Z Fold 4, Galaxy Z Flip 4, Note 10+ 5G, Galaxy J3 V 3rd Gen, Galaxy Note Pro, Galaxy Tab 4 (8.0, Galaxy

Tab E, Galaxy Tab S, Galaxy Tab S2, Galaxy J7 V 2nd Gen, Tab S5e, Galaxy Tab A, Galaxy Note 20 Ultra 5G, Galaxy A02s, Galaxy A12, Galaxy A01, Galaxy A21, Galaxy A51, Galaxy S7 edge, Galaxy J, Galaxy Note 10, Galaxy S20 5G, Gear S, Avalon V, ZenFone V, ZenFone V Live, Nexus 6, Pixel, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, pixel 4, Pixel 4 XL, Pixel 5, Pixel 6, Pixel 6 Pro, Pixel 6a, Pixel 7 Pro, Pixel 7, Pixel XL, Desire 526, Desire 612, Desire 626, , One remix, 10, One M9, Brigadier, DuraForce Pro, DuraForce Pro 2, DuraForce Ultra 5G, DuraForce Ultra 5G UW, DuraSport 5G UW, Tab 4 8 Plus, Exalt LTE, Extravert 2, G Pad 10.1 LTE, G Pad x8.3, G Vista, G3, G4, G6, G7 ThinQ, G8 ThinQ, K20 V, K20 V, Lancet, Stylo 2 V, Stylo 5, V20, V30, V40 ThinQ, V50 ThinQ 5G, Velvet 5G UW, Lumina 735, Droid Maxx, Droid Maxx 2, Droid Mini, Droid Turbo, Droid Turbo 2, Droid X (2nd Gen), Edge 2022, edge 5G UW, Edge+, Edge+ 5G UW, moto e5 play, moto e6, moto force z droid, moto g play (2021), Moto g power (2021), moto g power (2022), moto g pure, Moto g stylus 5G, Moto g stylus 5G, moto g6, moto g7 play, moto g7 power, Moto X (2nd Gen), Moto Z Force Droid, Moto Z Play Droid, moto z2 force edition, Moto Z2 Play, moto z3, moto z4, one 5G UW, one 5G UW ace, Razr (2020), 8 V 5G UW, 2 V Tella, 3 V, 8 5G UW, Compact Phone, Phone, Hydrogen One, XP8, Xperia Z2 Tablet, 10 5G UW, 30 V 5G, and Ellipsis 8.

The products in the preceding list, including all variations, editions, and applications of the foregoing, and all products and apparatuses of Verizon similar to the foregoing that include the claimed elements are the '543 Accused Instrumentalities.

U.S. PATENT NO. 9,198,042

Headwater accuses the following smartphones, basic phones, tablets, laptops, and hotspot devices sold (including those sold in bundles with data plans) or used by Verizon for use with Verizon's wireless network services of infringing each of the Asserted Claims of the '042 patent: Servers, hardware, software, and services leased, owned, supported, and/or operated by Verizon comprising Verizon's wireless network services functionality.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Apple software (e.g., iOS, WatchOS, etc.) including but not limited to the following: iPad Air, iPad Mini 2, iPhone 5C, iPhone 5S, iPad Air 2, iPad mini 3, iPhone 6, iPhone 6 Plus, iPad mini 4, iPad Pro, 12.9 in., iPhone 6S, iPhone 6S Plus, iPad Pro, 9.7 in, iPhone 7, iPhone 7 Plus, iPhone SE (1st Gen), iPad (5th Gen), iPad Pro, 10.5 in., iPad Pro, 12.9 in. (2nd Gen), Watch Series 3, iPhone 8, iPhone 8 Plus, iPhone X, iPad (6th Gen), Watch Series 4, iPad Pro, 11 in. (1st Gen), iPad Pro, 12.9 in. (3rd Gen), iPhone XR, iPhone XS, iPhone XS Max, iPad (7th Gen), iPad Air (3rd Gen), iPad Mini (5th Gen), iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, Watch Series 5, iPad (8th Gen), iPad Air (4th Gen), iPad Pro, 11 in. (2nd Gen), Watch Series 6, Watch Nike Series 6, Watch SE, iPad Pro, 12.9 in. (4th Gen), iPhone 12, iPhone 12 Mini, iPhone 12 Pro, iPhone 12 Pro Max, iPhone SE (2nd Gen), iPad (9th Gen), iPad

Mini (6th Gen), iPad Pro, 11 in. (3rd Gen), iPad Pro, 12.9 in. (5th Gen), iPhone 13, iPhone 13 Mini, iPhone 13 Pro, iPhone 13 Pro Max, Watch Series 7, iPad (10th Gen), iPad Air (5th Gen), Watch Series 8, Watch SE (2nd Gen), iPad Pro (6th Gen), iPhone 14, iPhone 14 Plus, Watch Ultra, iPhone 14 Pro, iPhone 14 Pro Max, iPhone SE (3rd Gen), iPhone 15, iPhone 15 Pro, and iPhone 15 Pro Max.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Android software (e.g., Android Operating System Platform) including but not limited to the following: Galaxy A03s, Galaxy A10e, Galaxy A13, Galaxy A14 5G, Galaxy A20, Galaxy A42 5G, Galaxy A50, Galaxy A53 5G UW, Galaxy Core Prime, Galaxy J3 Eclipse, Galaxy J7 V, Galaxy Note 10+, Galaxy Note 10+ 5G, Galaxy Note 20 5G, Galaxy Note 4, Galaxy Note 5, Galaxy Note 8, Galaxy Note 9, Galaxy S10, Galaxy S10 5G, Galaxy S10+, Galaxy S10e, Galaxy S20 FE 5G, Galaxy S20 Ultra 5G, Galaxy S20+ 5G, Galaxy S21 5G, Galaxy S21 FE 5G, Galaxy S21 Ultra 5G, Galaxy S21+ 5G, Galaxy S22, Galaxy S22 Ultra, Galaxy S22+, Galaxy S22+, Galaxy S23, Galaxy S5, Galaxy S6, Galaxy S6, Galaxy S6 edge, Galaxy S6 edge +, Galaxy S7, Galaxy S8, Galaxy S8+, Galaxy S9, Galaxy S9+, Galaxy XCover Pro, Galaxy XCover6 Pr, Galaxy Z Flip 3 5G, Galaxy Z Fold 3 5G, Galaxy Z Fold 4, Galaxy Z Flip 4, Note 10+ 5G, Galaxy J3 V 3rd Gen, Galaxy Note Pro, Galaxy Tab 4 (8.0, Galaxy Tab E, Galaxy Tab S, Galaxy Tab S2, Galaxy J7 V 2nd Gen, Tab S5e, Galaxy Tab A, Galaxy Note 20 Ultra 5G, Galaxy A02s, Galaxy A12, Galaxy A01, Galaxy A21, Galaxy A51, Galaxy S7 edge, Galaxy J, Galaxy Note 10, Galaxy S20 5G, Gear S, Avalon V, ZenFone V, ZenFone V Live, Nexus 6, Pixel, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, pixel 4, Pixel 4 XL, Pixel 5, Pixel 6, Pixel 6 Pro, Pixel 6a, Pixel 7 Pro, Pixel 7, Pixel XL, Desire 526, Desire 612, Desire 626, , One remix, 10, One M9, Brigadier, DuraForce Pro, DuraForce Pro 2, DuraForce Ultra 5G, DuraForce Ultra 5G UW, DuraSport 5G UW, Tab 4 8 Plus, Exalt LTE, Extravert 2, G Pad 10.1 LTE, G Pad x8.3, G Vista, G3, G4, G6, G7 ThinQ, G8 ThinQ, K20 V, K20 V, Lancet, Stylo 2 V, Stylo 5, V20, V30, V40 ThinQ, V50 ThinQ 5G, Velvet 5G UW, Lumina 735, Droid Maxx, Droid Maxx 2, Droid Mini, Droid Turbo, Droid Turbo 2, Droid X (2nd Gen), Edge 2022, edge 5G UW, Edge+, Edge+ 5G UW, moto e5 play, moto e6, moto force z droid, moto g play (2021), Moto g power (2021), moto g power (2022), moto g pure, Moto g stylus 5G, Moto g stylus 5G, moto g6, moto g7 play, moto g7 power, Moto X (2nd Gen), Moto Z Force Droid, Moto Z Play Droid, moto z2 force edition, Moto Z2 Play, moto z3, moto z4, one 5G UW, one 5G UW ace, Razr (2020), 8 V 5G UW, 2 V Tella, 3 V, 8 5G UW, Compact Phone, Phone, Hydrogen One, XP8, Xperia Z2 Tablet, 10 5G UW, 30 V 5G, and Ellipsis 8.

The products in the preceding list, including all variations, editions, and applications of the foregoing, and all products and apparatuses of Verizon similar to the foregoing that include the claimed elements are the '042 Accused Instrumentalities.

U.S. PATENT NO. 9,215,613

Headwater accuses the following smartphones, basic phones, tablets, laptops, and hotspot devices sold (including those sold in bundles with data plans) or used by Verizon for use with Verizon's wireless network services of infringing each of the Asserted Claims of the '613 patent:

Servers, hardware, software, and services leased, owned, supported, and/or operated by Verizon comprising Verizon's wireless network services functionality.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Apple software (e.g., iOS, WatchOS, etc.) including but not limited to the following: iPad Air, iPad Mini 2, iPhone 5C, iPhone 5S, iPad Air 2, iPad mini 3, iPhone 6, iPhone 6 Plus, iPad mini 4, iPad Pro, 12.9 in., iPhone 6S, iPhone 6S Plus, iPad Pro, 9.7 in, iPhone 7, iPhone 7 Plus, iPhone SE (1st Gen), iPad (5th Gen), iPad Pro, 10.5 in., iPad Pro, 12.9 in. (2nd Gen), Watch Series 3, iPhone 8, iPhone 8 Plus, iPhone X, iPad (6th Gen), Watch Series 4, iPad Pro, 11 in. (1st Gen), iPad Pro, 12.9 in. (3rd Gen), iPhone XR, iPhone XS, iPhone XS Max, iPad (7th Gen), iPad Air (3rd Gen), iPad Mini (5th Gen), iPhone 11, iPhone 11 Pro, iPhone 11 Pro Max, Watch Series 5, iPad (8th Gen), iPad Air (4th Gen), iPad Pro, 11 in. (2nd Gen), Watch Series 6, Watch Nike Series 6, Watch SE, iPad Pro, 12.9 in. (4th Gen), iPhone 12, iPhone 12 Mini, iPhone 12 Pro, iPhone 12 Pro Max, iPhone SE (2nd Gen), iPad (9th Gen), iPad Mini (6th Gen), iPad Pro, 11 in. (3rd Gen), iPad Pro, 12.9 in. (5th Gen), iPhone 13, iPhone 13 Mini, iPhone 13 Pro, iPhone 13 Pro Max, Watch Series 7, iPad (10th Gen), iPad Air (5th Gen), Watch Series 8, Watch SE (2nd Gen), iPad Pro (6th Gen), iPhone 14, iPhone 14 Plus, Watch Ultra, iPhone 14 Pro, iPhone 14 Pro Max, iPhone SE (3rd Gen), iPhone 15, iPhone 15 Pro, and iPhone 15 Pro Max.

Phones, tablets, wearables, and devices used, sold, offered for sale, or imported within six years of the filing of the date of the lawsuit comprising Android software (e.g., Android Operating System Platform) including but not limited to the following: Galaxy A03s, Galaxy A10e, Galaxy A13, Galaxy A14 5G, Galaxy A20, Galaxy A42 5G, Galaxy A50, Galaxy A53 5G UW, Galaxy Core Prime, Galaxy J3 Eclipse, Galaxy J7 V, Galaxy Note 10+, Galaxy Note 10+ 5G, Galaxy Note 20 5G, Galaxy Note 4, Galaxy Note 5, Galaxy Note 8, Galaxy Note 9, Galaxy S10, Galaxy S10 5G, Galaxy S10+, Galaxy S10e, Galaxy S20 FE 5G, Galaxy S20 Ultra 5G, Galaxy S20+ 5G, Galaxy S21 5G, Galaxy S21 FE 5G, Galaxy S21 Ultra 5G, Galaxy S21+ 5G, Galaxy S22, Galaxy S22 Ultra, Galaxy S22+, Galaxy S22+, Galaxy S23, Galaxy S5, Galaxy S6, Galaxy S6, Galaxy S6 edge, Galaxy S6 edge +, Galaxy S7, Galaxy S8, Galaxy S8+, Galaxy S9, Galaxy S9+, Galaxy XCover Pro, Galaxy XCover6 Pr, Galaxy Z Flip 3 5G, Galaxy Z Fold 3 5G, Galaxy Z Fold 4, Galaxy Z Flip 4, Note 10+ 5G, Galaxy J3 V 3rd Gen, Galaxy Note Pro, Galaxy Tab 4 (8.0, Galaxy Tab E, Galaxy Tab S, Galaxy Tab S2, Galaxy J7 V 2nd Gen, Tab S5e, Galaxy Tab A, Galaxy Note 20 Ultra 5G, Galaxy A02s, Galaxy A12, Galaxy A01, Galaxy A21, Galaxy A51, Galaxy S7 edge, Galaxy J, Galaxy Note 10, Galaxy S20 5G, Gear S, Avalon V, ZenFone V, ZenFone V Live, Nexus 6, Pixel, Pixel 2, Pixel 2 XL, Pixel 3, Pixel 3 XL, Pixel 3a, Pixel 3a XL, pixel 4, Pixel 4 XL, Pixel 5, Pixel 6, Pixel 6 Pro, Pixel 6a, Pixel 7 Pro, Pixel 7, Pixel XL, Desire 526, Desire 612, Desire 626, , One remix, 10, One M9, Brigadier, DuraForce Pro, DuraForce Pro 2, DuraForce Ultra 5G, DuraForce Ultra 5G UW, DuraSport 5G UW, Tab 4 8 Plus, Exalt LTE, Extravert 2, G Pad 10.1

LTE, G Pad x8.3, G Vista, G3, G4, G6, G7 ThinQ, G8 ThinQ, K20 V, K20 V, Lancet, Stylo 2 V, Stylo 5, V20, V30, V40 ThinQ, V50 ThinQ 5G, Velvet 5G UW, Lumina 735, Droid Maxx, Droid Maxx 2, Droid Mini, Droid Turbo, Droid Turbo 2, Droid X (2nd Gen), Edge 2022, edge 5G UW, Edge+, Edge+ 5G UW, moto e5 play, moto e6, moto force z droid, moto g play (2021), Moto g power (2021), moto g power (2022), moto g pure, Moto g stylus 5G, Moto g stylus 5G, moto g6, moto g7 play, moto g7 power, Moto X (2nd Gen), Moto Z Force Droid, Moto Z Play Droid, moto z2 force edition, Moto Z2 Play, moto z3, moto z4, one 5G UW, one 5G UW ace, Razr (2020), 8 V 5G UW, 2 V Tella, 3 V, 8 5G UW, Compact Phone, Phone, Hydrogen One, XP8, Xperia Z2 Tablet, 10 5G UW, 30 V 5G, and Ellipsis 8.

The products in the preceding list, including all variations, editions, and applications of the foregoing, and all products and apparatuses of Verizon similar to the foregoing that include the claimed elements are the '613 Accused Instrumentalities.

P.R. 3-1(C): CLAIM CHARTS

Headwater's analysis of Verizon's products and apparatuses is based upon information that is publicly available and based on Headwater's own investigation prior to any discovery in this action.

While the publicly available information constitutes evidence of the methods and apparatuses used by Headwater in the Accused Instrumentalities, direct evidence of the actual apparatuses and methods are at times not publicly available. Accordingly, these infringement contentions are based on the available public information, analysis, and reasonable inferences drawn from that information.

Headwater reserves the right to amend or supplement these disclosures for any of the following reasons (along with any other reason that may be permitted under the court's rules and orders):

- (1) Verizon provides evidence of the apparatuses and methods used in the Accused Instrumentalities;

- (2) The Asserted Claims may include elements that involve features that are implemented by hardware structures and logic and Headwater's current positions on infringement are set forth without the benefit of access to Verizon's source code, schematics, drawings, or other proprietary specifications or information, which cannot be obtained through publicly available information, for the Accused Instrumentalities. Therefore, it may be necessary for Headwater to supplement its positions on infringement after a complete production of such proprietary specifications or information by Verizon;
- (3) Headwater's position on infringement of specific claims will depend on the claim constructions adopted by the Court. Because said constructions have not yet occurred, Headwater cannot take a final position on the bases for infringement of the Asserted Claims; and
- (4) Headwater's investigation and analysis of Verizon's Accused Instrumentalities are based upon information made publicly available by Verizon and by Headwater's own investigations. Headwater reserves the right to amend these contentions based upon discovery of non-public information that Headwater anticipates receiving from Verizon during discovery.

Attached as Exhibits A through D, and incorporated herein in their entirety, are charts identifying where each element of the Asserted Claims of the '541, '543, '042, and '613 patents are found in the Accused Instrumentalities.

Unless otherwise indicated, the information provided that corresponds to each claim element is considered to indicate that each claim element is found within each of the different variations, versions, editions, and applications of each respective Accused Instrumentalities.

P.R. 3-1(D): LITERAL INFRINGEMENT AND DOCTRINE OF EQUIVALENTS

With respect to the patents at issue, Headwater contends that each element of each Asserted Claim is literally present. To the extent that Verizon identifies elements of the Asserted Claims that it contends are not literally present in the Accused Instrumentalities, Headwater contends that such elements are present under the doctrine of equivalents.

P.R. 3-1(E): PRIORITY DATES

<i>U.S. Patent No.</i>	<i>Priority Date</i>
8,589,541	January 28, 2009
8,924,543	January 28, 2009
9,198,042	January 28, 2009
9,215,613	January 28, 2009

P.R. 3-1(F): IDENTIFICATION OF INSTRUMENTALITIES PRACTICING THE CLAIMED INVENTION

The ItsOn software may incorporate or reflect the claims of the Asserted Patents. Headwater reserves the right to supplement this response should further investigation, discovery, or the court's claim construction rulings make such supplementation appropriate.

P.R. 3-2: DOCUMENT PRODUCTION ACCOMPANYING DISCLOSURE

P.R. 3-2(A) DOCUMENTS

Headwater is presently unaware of any documents that evidence any discussion with, disclosure to, or other manner of providing to a third party, or sale of or offer to sell, any of the inventions claimed in the patents in suit prior to their respective application dates.

A diligent search continues for documents, and Headwater reserves the right to supplement this response.

P.R. 3-2(B) DOCUMENTS

Headwater is presently unaware of any documents that evidence the conception, reduction to practice, design, or development of the claimed inventions, which were created on or before the application dates of the patents in suit or priority date identified pursuant to P.R. 3-1(e).

A diligent search continues for documents, and Headwater reserves the right to supplement this response.

P.R. 3-2(C) DOCUMENTS

The file histories for the '541, '543, '042, and '613 patents may be found in Headwater's production.

Date: September 28, 2023

/s/ Marc Fenster

Marc Fenster
CA State Bar No. 181067
Reza Mirzaie
CA State Bar No. 246953
Brian Ledahl
CA State Bar No. 186579
Ben Wang
CA State Bar No. 228712
Paul Kroeger
CA State Bar No. 229074
Neil A. Rubin
CA State Bar No. 250761
Kristopher Davis
CA State Bar No. 329627
James S. Tsuei
CA State Bar No. 285530
Philip Wang
CA State Bar No. 262239
Amy Hayden
CA State Bar No. 287026
James Milkey
CA State Bar No. 281283
Jason M. Wietholter
CA State Bar No. 337139
RUSS AUGUST & KABAT
12424 Wilshire Blvd. 12th Floor
Los Angeles, CA 90025
Telephone: 310-826-7474
rak_headwater@raklaw.com

**ATTORNEYS FOR PLAINTIFF,
Headwater Research LLC**

CERTIFICATE OF SERVICE

I certify that this document is being served upon counsel of record for Defendants on September 28, 2023 via electronic mail.

/s/ Marc Fenster
Marc Fenster